

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
UNITED STATES AIR FORCE - BARKSDALE AIR FORCE BASE
DRAFT HAZARDOUS WASTE CORRECTIVE ACTION RENEWAL PERMIT

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste corrective action renewal permit for the United States Air Force-Barksdale AFB, Department of the Air Force, 2D Civil Engineer Squadron (ACC), 334 Davis Avenue West, Suite 208, Barksdale AFB, Louisiana 71110-2078 for the Solid Waste Management Units (SWMUs) 1-13 and the two Areas of Investigation (AOIs). **The facility is located at 334 Davis Avenue West, Barksdale AFB, Bossier Parish.**

United States Air Force-Barksdale AFB (Barksdale) requests a hazardous waste permit governing Corrective Action of the following SWMUs and AOIs:

SWMU #1 – POL Flightline – Tank Sludge Disposal Areas (DP-21) – underground storage tanks/disposal areas
 SWMU #2 – Tanker Discharge Area South (SS-09)
 SWMU #3 – Original Fire Protection Training Area (FT-22) - spill area
 SWMU #4 – Fire Protection Training Area 1 (FT-01) – spill area
 SWMU #5 – Fire Protection Training Area 2 (FT-02) – spill area
 SWMU #6 – Aqueous Film Forming Foam (AFFF) Retention Pond (DP-28) – retention pond
 SWMU #7 – Macks Bayou (OT-06) – drainage ditch
 SWMU #8 – Sanitary Waste Treatment Plant No. 2 (WP-27) – disposal area
 SWMU #9 – Landfill No. 1 and POL Bulk Fuel Storage Tanks (DP-20) Landfill
 SWMU# 10 – Tanker Discharge Area North (SS-08) – disposal area
 SWMU #12 – Landfill No. 2 (LF-03) – Landfill
 SWMU #13 - Landfill No. 3 (LF-03) - Landfill
 AOI – Sanitary Waste Treatment Plant No. 1 (WP-26) – disposal area
 AOI – Cooper Bayou (OT-29) – drainage ditch.

The Corrective Action and SWMUs to be governed by this permit are for waste that was generated on-site. All waste disposal operations were closed in September 1998, and require a permit to govern Corrective Action on SWMUs 1-13 and the two AOIs.

SWMUs 1-13 and the two AOIs no longer receive waste. The draft Corrective Action renewal permit addresses the maintenance of all final covers, the groundwater monitoring program and any measures to be implemented during the remainder of the Corrective Action activities.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Wednesday, August 6, 2008.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste permit and the Corrective Action Permit Application are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

An additional copy may be reviewed at the Bossier Parish Public Library, Headquarters, 2206 Beckett Street, Bossier City, LA 71111.

Previous notices have been published in the Bossier Press Tribune and the Advocate on August 30, 2005.

Inquiries or requests for additional information regarding this permit action should be directed to Ms. Cara De Carlo, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3131.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft permit and associated information can be viewed on the LDEQ permits public webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 9028, Permit Number LA9571924050-CA-RN-1, and Activity Number PER20040001.

Scheduled Publication Date: June 20, 2008

BOBBY JINDAL
GOVERNOR



HAROLD LEGGETT, Ph.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Sue Landry, YF-02, DAF
Chief, Environmental Management
2 CES/CEV
334 Davis Ave West, Suite 208
Barksdale AFB, LA 71110-2078

RE: Draft Hazardous Waste Corrective Action Renewal Permit
Barksdale Air Force Base
LA9571924050 /AI#9028/ PER20040001

Dear Ms. Landry:

Attached is your copy of the Barksdale Air Force Base draft hazardous waste Corrective Action renewal permit, LA9571924050-CA-RN-1, which contains language pertaining to the maintenance of following units:

SWMU #1	POL Flightline – Tank Sludge Disposal Areas (DP-21) – underground storage tanks/disposal areas
SWMU #2	Tanker Discharge Area South (SS-09)
SWMU #3	Original Fire Protection Training Area (FT-22) - spill area
SWMU #4	Fire Protection Training Area 1 (FT-01) – spill area
SWMU #5	Fire Protection Training Area 2 (FT-02) – spill area
SWMU #6	Aqueous Film Forming Foam (AFFF) Retention Pond (DP-28) – retention pond
SWMU #7	Macks Bayou (OT-06) – drainage ditch
SWMU #8	Sanitary Waste Treatment Plant No. 2 (WP-27) – disposal area
SWMU #9	Landfill No. 1 and POL Bulk Fuel Storage Tanks (DP-20) Landfill
SWMU# 10	Tanker Discharge Area North (SS-08) – disposal area
SWMU #12	Landfill No. 2 (LF-03) – Landfill
SWMU #13	Landfill No. 3 (LF-03) - Landfill
AOI	Sanitary Waste Treatment Plant No. 1 (WP-26) – disposal area
AOI	Cooper Bayou (OT-29) – drainage ditch

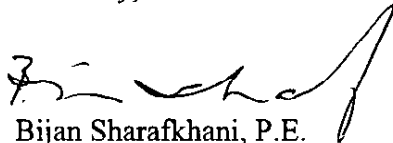
Ms. Landry
AI 9028 / PER 20040001
Page 2

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft renewal hazardous waste corrective action permit. By requests and if the Department finds a significant degree of public interest, a public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. Specific dates for the beginning and ending of the comment period are contained in the attached public notice.

Prior to taking a final action on the draft hazardous waste corrective action renewal permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number (9028), EPA ID Number (LA9571924050), and Permit Activity Number PER20040001 on all future correspondence pertaining to this matter. If you have any questions, please contact Ms. Cara De Carlo of the Waste Permits Division at (225) 219-3131 or Ms. Soumaya Ghosn of the Public Participation Group at (225) 219-3276.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bijan Sharafkhani', with a stylized flourish at the end.

Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

cd

Attachment

c: Kishor Fruitwala – EPA Region 6

**DRAFT
HAZARDOUS WASTE CORRECTIVE ACTION
PERMIT**

**BARKSDALE AIR FORCE BASE
BARKSDALE AFB, LOUISIANA**

LA 9571924050-CA-RN-1

AI#9028 / PER20040001

RECORD CENTER COPY

FACT SHEET

FACT SHEET

FOR THE DRAFT HAZARDOUS WASTE CORRECTIVE ACTION RENEWAL PERMIT PREPARED FOR

Barksdale Air Force Base

EPA ID # LA9571924050

Agency Interest # 9028

PER20040001

Barksdale AFB, Louisiana

Bossier Parish

Permit Number LA9571924050-CA-RN-1

I. INTRODUCTION

This fact sheet has been developed in accordance with the Louisiana Administrative Code (LAC) 33:V.703.D and briefly sets forth principal and significant facts, legal, methodological and policy requirements of the proposed draft Corrective Action Renewal Permit for Barksdale Air Force Base (Barksdale AFB), EPA ID Number LAD9571924050, Agency Interest Number 9028, Bossier Parish, Louisiana. The site no longer has any permitted/regulated units. This draft permit has been developed for the Barksdale AFB site's Corrective Action only.

Barksdale AFB is seeking to renew its Corrective Action Permit governing the Corrective Action activities of Solid Waste Management Units 1-13 and the two Areas of Investigation (AOIs).

The Louisiana Department of Environmental Quality (LDEQ) has prepared this proposed draft hazardous waste Corrective Action renewal permit which addresses the requirements of LAC Title 33, Part V, Subpart 1 and the Federal Resource Conservation and Recovery Act (RCRA) as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA).

II. THE PERMITTING PROCESS

The purpose of this fact sheet is to initiate the permit decision process. The LDEQ's Office of Environmental Services - Waste Permits Division (OES-WPD) is required to prepare this draft hazardous waste permit. The permit sets forth all the applicable conditions, which the permittee is required to comply with during the life of the permit. Barksdale AFB submitted its Hazardous Waste Part B Corrective Action Permit Application, dated January 15, 2004, to comply with the Environmental Protection Agency (EPA) regulations requiring Corrective Action for Solid Waste Management Units, as per Subtitle C of the Resource Conservation

and Recovery Act (RCRA).

The permitting process will afford the LDEQ, interested citizens, and other agencies the opportunity to evaluate the ability of the permittee to comply with the requirements of the LAC 33:V.Subpart 1, and the Hazardous and Solid Waste Amendments (HSWA) portion.

The public is given a minimum of forty-five (45) days to review and comment on the draft corrective action permit. The Administrative Authority, prior to making a decision or taking any final action on the draft permit, will consider all significant comments. The decision of the Administrative Authority shall be to issue, deny, modify, or revoke the draft corrective action permit in accordance with LAC 33:V.705.

A. DRAFT HAZARDOUS WASTE PERMIT

The Waste Permits Division reviewed the permit application and other pertinent technical information, and prepared a draft permit that contains the language that pertains to the corrective action of the listed facilities.

This draft hazardous waste permit is a tentative determination and is not the final decision of the Administrative Authority.

B. PUBLIC COMMENT PERIOD

LAC 33:V.715 requires that the public be given at least forty-five (45) days to comment on a draft permit decision.

The specific dates for the opening and closing of the public comment period are contained in the public notice that was issued for this particular permitting action. Any person interested in commenting on the draft permit for Barksdale AFB must do so within the allotted forty-five (45) day comment period.

A public hearing may be held, if requested, or if the draft permit generates a significant amount of public interest, on the date, at the location and time provided in the public notice of the hearing. LDEQ will hold the hearing within forty-five (45) days after public notice of the hearing.

Public notice of the proposed permitting action and of the hearing shall be published in specified newspapers, announced on the designated radio station, and mailed to those persons contained on the facility's mailing list.

C. LOCATIONS OF AVAILABLE INFORMATION

The administrative record, including all supporting documents, is on file at the LDEQ Public Records Center, Room 1-127, 602 North 5th Street, Baton Rouge, Louisiana. These documents may be inspected and copied (at \$0.25 per copy page) at any time

between the hours of 8:00 to 4:30 p.m., Monday through Friday (except holidays).

In addition, a copy of the draft Corrective Action Renewal Permit, fact sheet, and supporting documents are available for review at the **Bossier Parish Library (headquarters), 2206 Beckett, Bossier City, Louisiana 71111 and the Bossier Parish Library, Aulds Branch, 3950 Wayne Avenue, Bossier City, Louisiana 71112.**

D. WRITTEN COMMENT SUBMISSION

Interested persons may submit written comments on the draft Corrective Action Permit and/or a request for public hearing to the Administrative Authority, at the address listed below, no later than 12:30 p.m. on the closing date of the comment period. All comments should include:

1. the name and address of the commenter,
2. a concise statement of the exact basis for any comment and supporting relevant facts upon which the comment is based,
3. identification of the facility commented on (the EPA Identification Number and AI number), and
4. supporting relevant facts upon which the comments are based.

All comments, further requests for information (including copies of this decision and fact sheet) and any requests by public interest groups or individuals, who would like to be included in the mailing list, should be made in writing to:

Ms. Soumaya Ghosn
Louisiana Department of Environmental Quality
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
(225) 219-3276 or fax (225) 219-3309

Any technical questions regarding this draft permit should be addressed to:

Ms. Cara De Carlo
Louisiana Department of Environmental Quality
Office of Environmental Services
Waste Permits Division
Post Office Box 4313
Baton Rouge, LA 70821-4313
(225) 219-3131 or fax (225) 219-3158

III. DESCRIPTION OF OVERALL SITE

Barksdale AFB ceased its various hazardous waste operations (includes jet fuel spillage, training fires, and landfills) at its installation by 1989. However, Barksdale AFB continues to be responsible for the Corrective Action of SWMUs 1-13 and the two AOIs.

IV. HAZARDOUS WASTE FACILITIES

This draft hazardous waste Corrective Action Renewal Permit is only applicable to the following Solid Waste Management Units (SWMUs) and the two AOIs:

SWMU #1 – POL Flightline – Tank Sludge Disposal Areas (DP-21) – underground storage tanks/disposal areas
SWMU #2 – Tanker Discharge Area South (SS-09)
SWMU #3 – Original Fire Protection Training Area (FT-22) - spill area
SWMU #4 – Fire Protection Training Area 1 (FT-01) – spill area
SWMU #5 – Fire Protection Training Area 2 (FT-02) – spill area
SWMU #6 – Aqueous Film Forming Foam (AFFF) Retention Pond (DP-28) – retention pond
SWMU #7 – Macks Bayou (OT-06) – drainage ditch
SWMU #8 – Sanitary Waste Treatment Plant No. 2 (WP-27) – disposal area
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SWMU #12 – Landfill No. 2 (LF-03) – Landfill
SWMU #13 - Landfill No. 3 (LF-03) - Landfill
AOI – Sanitary Waste Treatment Plant No. 1 (WP-26) – disposal area
AOI – Cooper Bayou (OT-29) – drainage ditch

The units exist in various locations throughout the Base, which spans an area of approximately 22,000 acres. The units were closed by September of 1998, in accordance with an approved closure plan. The units no longer receive hazardous waste. The only ongoing activities involving SWMUs 1-13 and the two AOIs are groundwater monitoring and cap maintenance.

V. FINANCIAL AND LIABILITY REQUIREMENTS

As a federal government facility, Barksdale AFB is exempt from the financial requirements as specified in LAC 33:V.3701.C. However, Barksdale AFB will fulfill any and all financial requirements arising from the activities associated with this Corrective Action Permit Renewal.

VI. SUMMARY OF ENVIRONMENTAL FACTORS CONSIDERED

Pursuant to LA.R.S.30:2018.E.3, this draft hazardous waste post-closure permit is not subject to the requirements regarding environmental assessment statements or IT Analysis (Save Ourselves v. La. Envtl. Control Comm'n, 452 So. 2d 1152, 1159, La. 1984). Nevertheless, the LDEQ has considered factors similar to the IT Analysis in preparing this draft permit. This is a preliminary analysis based on information currently available to the LDEQ.

A. **The potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible.**

Barksdale AFB submitted its Corrective Action Permit Renewal Application for SWMUs 1-13 and the two AOIs. The units at the Base were closed in accordance with an LDEQ approved closure plan. SWMUs 1-13 and the two AOIs were managed under the Defense Environmental Restoration Program (ERP) to eliminate potential hazards to public health and the environment. Following implementation of the ERP, the SWMUs and AOIs have undergone the required RCRA Facility Investigation and other RCRA Corrective Actions as appropriate for each site. Corrective Action Summaries for SWMUs 1-13 and the two AOIs can be found in Appendix 1 of the Permit.

This permit does not propose the alteration of waste classifications, codes or characteristics. Barksdale AFB has closed all units that were involved in the treatment and disposal of hazardous waste. The design and Corrective Action procedures associated with SWMUs 1-13 and the two AOIs will comply with all regulatory and permit requirements to prevent the escape of any hazardous material into the surrounding environment. These actions minimize the potential and real adverse environmental effects of handling hazardous waste to the maximum extent possible.

B. **A cost benefit analysis of the environmental impact balanced against the social and economic benefits of the project demonstrates that the social and economic benefits outweigh environmental impacts.**

This is an existing facility submitting an application for the Corrective Action on its existing, Solid Waste Management Units. Barksdale AFB no longer maintains hazardous waste operations at the Base.

There are no ongoing hazardous waste management activities involving SWMUs 1-13 and the two AOIs other than maintenance of the protective cap and groundwater monitoring.

The proposed permit should have little or no affect on property values, the tax base, economic development, or public costs as they pertain to the economics of the local community. The proposed draft hazardous waste permit should not promote the need for additional fire protection, police, medical facilities, or roads.

C. There are no alternative projects or alternative sites or mitigating measures which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.

1. ALTERNATIVE PROJECTS

This draft permit is for the Corrective Action on SWMUs 1-13 and the two AOIs. There appears to be no known alternative project that would offer more protection to the environment than issuing a Corrective Action permit for the closed units without unduly curtailing non-environmental benefits.

2. ALTERNATIVE SITE

This draft permit is for an existing facility. The Corrective Action and SWMUs to be governed by this permit are for waste that was generated on-site. Since Corrective Action requirements are in place at the facility, relocating these units to a different existing or new location could result in greater environmental impact due to siting and transportation considerations, as well as increased waste production and transportation.

3. MITIGATING MEASURES

By submittal of its hazardous waste permit renewal application, Barksdale AFB has demonstrated that the Corrective Action on SWMUs 1-13 and the two AOIs will comply with all applicable hazardous waste regulations and permit requirements and will be protective of human health and the environment. No mitigating measures would offer more protection to the environment than permitting without unduly curtailing non-environmental benefits.

PUBLIC PARTICIPATION

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
UNITED STATES AIR FORCE - BARKSDALE AIR FORCE BASE
DRAFT HAZARDOUS WASTE CORRECTIVE ACTION RENEWAL PERMIT

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste corrective action renewal permit for the United States Air Force-Barksdale AFB, Department of the Air Force, 2D Civil Engineer Squadron (ACC), 334 Davis Avenue West, Suite 208, Barksdale AFB, Louisiana 71110-2078 for the Solid Waste Management Units (SWMUs) 1-13 and the two Areas of Investigation (AOIs). **The facility is located at 334 Davis Avenue West, Barksdale AFB, Bossier Parish.**

United States Air Force-Barksdale AFB (Barksdale) requests a hazardous waste permit governing Corrective Action of the following SWMUs and AOIs:

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AOI – Cooper Bayou (OT-29) – drainage ditch.

The Corrective Action and SWMUs to be governed by this permit are for waste that was generated on-site. All waste disposal operations were closed in September 1998, and require a permit to govern Corrective Action on SWMUs 1-13 and the two AOIs.

SWMUs 1-13 and the two AOIs no longer receive waste. The draft Corrective Action renewal permit addresses the maintenance of all final covers, the groundwater monitoring program and any measures to be implemented during the remainder of the Corrective Action activities.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m.,**

Wednesday, August 6, 2008. Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

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Inquiries or requests for additional information regarding this permit action should be directed to Ms. Cara De Carlo, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3131.

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All correspondence should specify AI Number 9028, Permit Number LA9571924050-CA-RN-1, and Activity Number PER20040001.

Scheduled Publication Date: June 20, 2008

PUBLIC RADIO ANNOUNCEMENT

The Louisiana Department of Environmental Quality is accepting written comments on the draft Hazardous waste permit for the United States Air Force, Barksdale Air Force Base for the Solid Waste Management Units 1-13 and the two Areas of Investigation. **The facility is located at 334 Davis Avenue West, Barksdale AFB, Bossier Parish.**

Barksdale Air Force Base requested a hazardous waste permit governing Correction Action of the SWMUs and AOIs.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Wednesday, August 6, 2008.** Written comments will be considered prior to a final permit decision.

The draft permit, Corrective Action Permit Application and all related information is available at LDEQ, Headquarters in Baton Rouge and at the **Bossier Parish Library, Headquarters, 2206 Beckett Street, Bossier City, LA.**

For any inquiries contact LDEQ Customer Service Center at (225) 219-LDEQ, that is (225) 219-5337.

All correspondence should specify AI Number 9028, Permit Number LA9571924050-CA-RN-1 and Activity Number PER20040001.

Detailed information is available in the public notice scheduled for publication in The Advocate and The Bossier Press Tribune on June 20, 2008 and can be viewed on the LDEQ Permits Public Notice Web page.

Scheduled Broadcast: Friday, June 20, 2008

SIGNATURE PAGE

DRAFT PERMIT**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY****CORRECTIVE ACTION PERMIT**

PERMITTEE: Barksdale Air Force Base

PERMIT NUMBER: LA 9571924050-CA-RN-1
Agency Interest #9028/Activity # PER20040001

FACILITY LOCATION: 334 Davis Avenue West
BARKSDALE AFB, LOUISIANA, 71110-2078

This permit is issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 30:2171 et seq., and the regulations adopted thereunder and under the authority of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) to Barksdale AFB, (hereafter called the Permittee), for Corrective Action on Thirteen (13) Solid Waste Management Units (SWMUs) and Two (2) Areas of Investigation (AOIs) located in Barksdale AFB, Louisiana, at latitude 32° 29' 31" and longitude 93° 40' 19."

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the Louisiana Department of Environmental Quality, or his/her designee.

The permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the applicable regulations contained in the Louisiana Administrative Code, Title 33, Part V, Subpart 1, (LAC 33:V.Subpart 1). Applicable regulations are those that are in effect on the effective date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The Permittee must inform the LDEQ of any deviation from or changes in the information in the application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit shall be effective as of _____ DRAFT _____, and shall remain in effect until _____ DRAFT _____, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705 of the Louisiana Hazardous Waste Regulations. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.

Expiration of this permit does not relieve the permittee of the responsibility to reapply for a permit for the remainder of the corrective action.

Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within thirty (30) days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the Secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:

Louisiana Department of Environmental Quality
Office of the Secretary
Attention: Hearings Clerk, Legal Services Division
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

DRAFT _____
Cheryl Sonnier Nolan, Assistant Secretary
Louisiana Department of Environmental Quality

Date

PART A

APPLICATION

United States Environmental Protection Agency
HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See instructions on page 35)	First Name: Sue	MI:	Last Name: Landry
	Phone Number: 318-456-4629		Phone Number Extension:
2. Facility Permit Contact Mailing Address (See instructions on page 35)	Street or P.O. Box: 2 CES/CEV, 334 Davis Avenue West		
	City, Town, or Village: Barksdale AFB		
	State: LA		
	Country: USA		Zip Code: 71110
3. Legal Owner Mailing Address and Telephone Number (See instructions on page 36) <input type="radio"/> Same as Facility Addr.	Street or P.O. Box: 109 Barksdale Boulevard West, Suite 100		
	City, Town, or Village: Barksdale AFB		
	State: LA		
	Country: USA	Zip Code: 71110	Phone Number: 318-456-2170
4. Operator Mailing Address and Telephone Number (See instructions on page 36) <input type="radio"/> Same as Facility Addr. <input type="radio"/> Same as Owner Addr.	Street or P.O. Box:		
	City, Town, or Village:		
	State:		
	Country:	Zip Code:	Phone Number:
5. Facility Existence Date (See instructions on page 36)	Facility Existence Date (mm/dd/yyyy): 1933		
6. Other Environmental Permits (See instructions on page 36)			
A. Permit Type (Enter code)	B. Permit Number	C. Description	
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7. Nature of Business (Provide a brief description; see instructions on page 37)			
United States Air Force Base - 2d Bomb Wing			

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Process Codes and Design Capacities (See Instructions on page 37)

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 9.

B. PROCESS DESIGN CAPACITY - For each code entered in column A, enter the capacity of the process.

- 1. AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
- 2. UNIT OF MEASURE** - For each amount entered in column B(1), enter the code in column B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<input type="checkbox"/> D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	<input type="checkbox"/> T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour
<input type="checkbox"/> D80	Landfill	Acre-feet; Hectare-meters; Acres; Cubic Meters; Hectares; Cubic Yards	<input type="checkbox"/> T82	Lime Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour
<input type="checkbox"/> D81	Land Treatment	Acres or Hectares	<input type="checkbox"/> T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour
<input type="checkbox"/> D82	Off-site Disposal	Gallons Per Day or Liters Per Day	<input type="checkbox"/> T84	Phosphate Kiln	Tons Per Hour; Short Tons Per Hour; Btu Per Hour; Liters Per Hour; Kilograms Per Hour
<input type="checkbox"/> D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	<input type="checkbox"/> T85	Coke Oven	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour
<input type="checkbox"/> D99	Other Disposal	Any Unit of Measure Listed Below	<input type="checkbox"/> T86	Blast Furnace	Hours; or Million Btu Per Hour
<input type="checkbox"/> S01	Containment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	<input type="checkbox"/> T87	Smelting, Melting, or Refining Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour
<input type="checkbox"/> S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	<input type="checkbox"/> T88	Titanium Dioxide Chloride Oxidation Reactor	Tons Per Hour; Short Tons Per Hour; Btu Per Hour; Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour
<input type="checkbox"/> S03	Waste Pile	Cubic Yards or Cubic Meters	<input type="checkbox"/> T89	Methanol Reforming Furnace	Tons Per Hour; Short Tons Per Hour; Btu Per Hour; Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour
<input type="checkbox"/> S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	<input type="checkbox"/> T90	Pulp/Liquor Recovery Furnace	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid
<input type="checkbox"/> S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	<input type="checkbox"/> T91	Other Industrial Furnaces	Hours; or Million Btu Per Hour
<input type="checkbox"/> S06	Containment Building Storage	Cubic Yards or Cubic Meters	<input type="checkbox"/> T92	Listed In 48 CFR 3260.10	
<input type="checkbox"/> S99	Other Storage	Any Unit of Measure Listed Below	<input type="checkbox"/> T93		
<input type="checkbox"/> T01	Tank Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour	<input type="checkbox"/> T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
<input type="checkbox"/> T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour	<input type="checkbox"/> X01	Miscellaneous (Subpart X)	
<input type="checkbox"/> T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	<input type="checkbox"/> X02	Open Burning/Open Dioxination Mechanical Processing	Any Unit of Measure Listed Below
<input type="checkbox"/> T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour	<input type="checkbox"/> X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
<input type="checkbox"/> T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	<input type="checkbox"/> X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meters; Gallons; or Liters
			<input type="checkbox"/> X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G	Short Tons Per Hour	D	Cubic Yards	Y
Gallons Per Hour	H	Metric Tons Per Hour	W	Cubic Meters	C
Gallons Per Day	U	Short Tons Per Day	N	Acres	A
Liters	L	Metric Tons Per Day	S	Acre-feet	Q
Liters Per Hour	H	Pounds Per Hour	J	Hectares	F
Liters Per Day	V	Kilograms Per Hour	R	Hectare-meter	F
		Million Btu Per Hour	X	Btu Per Hour	I

8. Process Codes and Design Capacities (Continued)**EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.**

Line Number	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	
		(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 1	S 0 2	5 3 3 . 7 8 8	G	0 0 1	
1			SHORT TONS PER HOUR		
2			SHORT TONS PER HOUR		
3			SHORT TONS PER HOUR		
4			SHORT TONS PER HOUR		
5			SHORT TONS PER HOUR		
6			SHORT TONS PER HOUR		
7			SHORT TONS PER HOUR		
8			SHORT TONS PER HOUR		
9			SHORT TONS PER HOUR		
10			SHORT TONS PER HOUR		
11			SHORT TONS PER HOUR		
12			SHORT TONS PER HOUR		
13			SHORT TONS PER HOUR		

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

Other Processes (See instructions on page 37 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)

Line Number (Enter 9s in sequence with Item 8)	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
		(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 1	T 0 4				In-situ Vitrification
1			SHORT TONS PER HOUR		
2			SHORT TONS PER HOUR		
3			SHORT TONS PER HOUR		
4			SHORT TONS PER HOUR		

Description of Hazardous Wastes (See Instructions on page 37)

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in column B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate the waste will be stored, treated, and/or disposed at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

- Enter the first two as described above.
 - Enter "000" in the extreme right box of Item 10.D(1).
 - Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.
- 2. PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.
- Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an Incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES				
				(1) PROCESS CODES (Enter code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))	
X 1	K 0 5 4	900	P	T 0 3	D 8 0			
X 2	D 0 0 2	400	P	T 0 3	D 8 0			
X 3	D 0 0 1	100	P	T 0 3	D 8 0			
X 4	D 0 0 2						Included With Above	

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10. Description of Hazardous Wastes (Continued; use additional sheets as necessary)							
Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES			
				(1) PROCESS CODES (Enter code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	--		--				
2	--		--				
3	--		--				
4	--		--				
5	--		--				
6	--		--				
7	--		--				
8	--		--				
9	--		--				
10	--		--				
11	--		--				
12	--		--				
13	--		--				
14	--		--				
15	--		--				
16	--		--				
17	--		--				
18	--		--				
19	--		--				
20	--		--				
21	--		--				
22	--		--				
23	--		--				
24	--		--				
25	--		--				
26	--		--				
27	--		--				
28	--		--				
29	--		--				
30	--		--				
31	--		--				
32	--		--				
33	--		--				

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Map (See Instructions on page 38)

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

12. Facility Drawing (See Instructions on page 39)

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

13. Photographs (See Instructions on page 39)

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

14. Comments (See Instructions on page 39)

There is no active treatment, storage, or disposal facility (TSDF) at Barksdale Air Force Base.

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BODY OF PERMIT

**BARKSDALE AIR FORCE BASE
EPA ID# LA 9571924050
Agency Interest# 9028
Bossier Parish
Barksdale AFB, Louisiana
PER20040001
Permit Number LA 9571924050-CA-RN-1**

I. PERMIT PREAMBLE

This permit is issued to Barksdale AFB, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. seq., and the regulations adopted thereunder.

GLOSSARY OF TERMS

For the purposes of this permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

“Administrative Authority” means the Secretary of the Louisiana Department of Environmental Quality or his/her designee (including appropriate assistant secretary).

“Application” refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a permit.

“Area of Concern” (AOC) means any discernable unit or area which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU.

“Area of Investigation” (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

“Beneficial Resource” describes natural resources that are useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific ground water or surface water sources, as a “Special Beneficial Resource,” or “Designated Beneficial Resource.” The beneficial resources then may be entitled to greater protection from contamination.

“Constituents of Concern” (COC) means the COPC’s that pose a significant risk.

“Constituents of Potential Concern” (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPC’s for each release site based on existing sampling data, waste analysis reports, etc.

“Conceptual Site Model” (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

“CWA” means Clean Water Act.

“Corrective Action” is an activity conducted to protect human health and the environment.

“Dense Nonaqueous Phase Liquid (DNAPL)” a dense liquid not dissolved in water, commonly referred to as “free product.”

“Department” means the Louisiana Department of Environmental Quality (LDEQ).

“EPA” means the United States Environmental Protection Agency.

“Facility” means, for the purpose of conducting corrective action under LAC 33:V.3322, all the contiguous property under the control of the Permittee.

“HSWA” means the 1984 Hazardous and Solid Waste Amendments to RCRA.

“Hazardous Constituent” means any constituent identified in LAC 33:V.Chapter 31.Table 1, or any constituent identified in LAC 33:V.3325.Table 4.

“LDEQ” means the Louisiana Department of Environmental Quality.

“Light Nonaqueous Phase Liquid (LNAPL)” a light liquid not dissolved in water, commonly referred to as “free product.”

“Newly-discovered Release” any release(s) of hazardous waste, including hazardous constituents, in which there is a statistically significant increase over the background data for the media of concern, during the course of groundwater monitoring, field investigation, environmental auditing, or by other means.

“Operating Record” means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this permit, document noncompliance with this permit, or document actions taken to remedy noncompliance with this permit. A minimum list of documents that must be included in the operating record are identified at LAC 33:V.1529.B.

“Permittee” means Barksdale AFB, Barksdale AFB, Louisiana 71110-2078.

"RCRA Permit" means the full permit, with RCRA and HSWA portions.

"RFA" means RCRA Facility Assessment.

"RFI" means RCRA Facility Investigation.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"Solid Waste Management Unit" (SWMU) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as permit requirements until permit modification procedures as specified in Condition II.C of the permit and LAC 33:V.321 are completed.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct corrective action activities associated with the following Solid Waste Management Units (SWMUs) and Areas of Interest (AOIs):

- SWMU #1 – POL Flightline – Tank Sludge Disposal Areas (DP-21) – underground storage tanks/disposal areas
- SWMU #2 – Tanker Discharge Area South (SS-09)
- SWMU #3 – Original Fire Protection Training Area (FT-22) - spill area
- SWMU #4 – Fire Protection Training Area 1 (FT-01) – spill area
- SWMU #5 – Fire Protection Training Area 2 (FT-02) – spill area
- SWMU #6 – Aqueous Film Forming Foam (AFFF) Retention Pond (DP-28) – retention pond
- SWMU #7 – Macks Bayou (OT-06) – drainage ditch
- SWMU #8 – Sanitary Waste Treatment Plant No. 2 (WP-27) – disposal area
- SWMU #9 – Landfill No. 1 and POL Bulk Fuel Storage Tanks (DP-20) Landfill
- SWMU# 10 – Tanker Discharge Area North (SS-08) – disposal area
- SWMU #12 – Landfill No. 2 (LF-03) – Landfill
- SWMU #13 - Landfill No. 3 (LF-03) - Landfill
- AOI – Sanitary Waste Treatment Plant No. 1 (WP-26) – disposal area
- AOI – Cooper Bayou (OT-29) – drainage ditch

This corrective action will be conducted in accordance with the conditions of this permit and Sections 206, 212, and 224 of HSWA which modify Sections 3004 and 3005 of RCRA. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Condition 3013 or Condition 7003 of RCRA, or under Condition 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-

application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit and in accordance with LAC 33:V.309.H.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;

II.E.8.b. have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;

II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

II.E.8.d. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method.

II.E.9.b. Records of monitoring information shall include:

II.E.9.b.(1) the date, exact place, and time of sampling or measurements;

II.E.9.b.(2) the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;

II.E.9.b.(3) the date(s) analyses were performed;

II.E.9.b.(4) the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5) the analytical techniques or methods used;

II.E.9.b.(6) the results of such analyses; and

II.E.9.b.(7) associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the LDEQ required by this permit is accredited by the

Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the LDEQ.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website: <http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx>.

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the LDEQ;
- required to be included in a monitoring report submitted to the LDEQ;
- required to be submitted by contract; or
- otherwise required by the LDEQ regulations.

This includes, but is not limited to data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document quality assurance/quality control procedures.

II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I.Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records from all ground water monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit, until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable Conditions of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531. Before transferring ownership or operation, the permittee shall notify the new owner or operator in writing of all the requirements of the LAC 33:V Subpart 1.

The Permittee's failure to notify the new owner or operator of the requirements in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date (LAC 33:V.309.L.6).

II.E.16. Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

II.E.17. Non-Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.18. Unauthorized Discharge to Groundwater Notification

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.19. Written Notification Reports for Unauthorized Discharges

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Conditions II.E.16, II.E.17 or II.E.18 of this permit. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

II.E.20. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 or Condition II.E.17 of this permit that may endanger the human health or the environment. This report shall include at minimum the following information:

II.E.20.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.20.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.20.b.(1) name, address, and telephone number of the owner or operator;

II.E.20.b.(2) name, address, and telephone number of the facility;

II.E.20.b.(3) date, time, and type of incident;

II.E.20.b.(4) name and quantity of materials involved;

II.E.20.b.(5) the extent of injuries, if any;

II.E.20.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.20.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

II.E.21. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment not reported under Condition II.E.19 of this permit. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the

noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.22. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above and as required by LAC 33:V.309.L.1, L.2, and L.6, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20 of this permit.

II.E.23. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information as required by LAC 33:V.309.L.12.

II.E.24. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.25. Schedule of Compliance

II.E.25.a. Within sixty (60) days from the effective date of the permit, the Permittee must submit to the Administrative Authority a Notice of Intent to Request Use of the Corrective Action Strategy (CAS). This Notice must be submitted in accordance with Condition VIII.B.1 of the Permit.

II.E.25.b. Within one-hundred twenty (120) days from the effective date of the Permit, the Permittee must submit a written request for a CAS Scoping Meeting. This meeting between the Permittee and Administrative Authority must occur in Accordance with the deadlines specified in Condition VIII, Table 1.

II.E.25.c. Within one-hundred twenty (120) days of the Scoping Meeting, the Permittee must submit a Conceptual Site Model as described in Condition VIII.D of this permit and in accordance with the deadlines specified in Appendix 1, Table 1.

II.E.26. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. PERMIT TYPE-SPECIFIC CONDITIONS

III.A. SECURITY

The Permittee must comply with security provisions in accordance with all applicable requirements of the United States Air Force as well as all requirements of any other applicable governing authority.

III.B. GENERAL INSPECTION REQUIREMENTS

The Permittee must conduct inspections in accordance with all applicable requirements of the United States Air Force as well as all requirements of any other applicable governing authority. The Permittee must, in accordance with the aforementioned requirements, remedy any deterioration or malfunction discovered by an inspection.

III.C. PREPAREDNESS AND PREVENTION

III.C.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, in accordance with all applicable requirements assigned by the United States Air Force as well as all requirements of any other applicable governing authority.

III.C.2. Arrangements with Local Authorities

The Permittee shall carry documentation of written arrangements with state and local agencies in accordance with all applicable requirements assigned by the United States Air Force as well as all requirements of any other applicable governing authority.

Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal as required.

III.D. CONTINGENCY PLAN

III.D.1. Implementation of Plan

Whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment, the Permittee must immediately carry out the provisions of the Contingency Plan, and follow the emergency procedures described by all applicable requirements assigned by the United States Air Force as well as all requirements of any other applicable governing authority.

IV. PERMITTED UNITS (RESERVED)

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED UNITS (RESERVED)

VI. GROUNDWATER PROTECTION (RESERVED)

VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS

VII.A. STANDARD CONDITIONS

VII.A.1. Waste Minimization

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

VII.A.1.a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

VII.A.1.b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

VII.A.1.c. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

VII.A.1.d. Factors that have prevented implementation of source reduction and/or recycling;

VII.A.1.e. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

VII.A.1.f. An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

VII.A.1.g. A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

VII.A.1.h. A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

VII.A.1.i. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

VII.A.1.j. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

VII.A.1.k. The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, Integrated Environmental Management System Implementation Guide, EPA 744-R-00-011, October 2000, found on the EPA website at www.epa.gov/opptintr/dfe/pubs/iems/iems_guide/index.htm.

VII.A.2. Dust Suppression

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

VII.A.3. Failure to Disclose

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

VII.A.4.a. If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

VII.A.4.b. The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

VII.A.4.c. Modifications of this Permit do not constitute a reissuance of the Permit.

VII.A.5. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

VII.A.6. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

VII.A.6.a. Become effective by statute;

VII.A.6.b. Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

VII.A.6.c. Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

VII.A.7. Specific Waste Ban

VII.A.7.a. The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

VII.A.7.b. The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

VII.A.7.c. The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

VII.A.7.d. The Permittee shall review the waste analysis plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

VII.A.8. Information Submittal for the Corrective Action Strategy

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the corrective action strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be

requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

**Louisiana Department of Environmental Quality
Office of Environmental Assessment
Environmental Technology Division
P.O. Box 4314
Baton Rouge, LA 70821-4314**

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

VII.A.9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

VII.A.10. Management of Wastes

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB-CC AIR REGULATIONS)

(RESERVED)

VII.C. SPECIFIC CONDITION - CLOSURE

(RESERVED)

VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to ground water, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a release area. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the **Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP)** for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

VIII.A. ALTERNATE CORRECTIVE ACTION

VIII.A.1. Introduction to CAS

This Permit will utilize the CAS Guidance Document (www.epa.gov/Arkansas/6pd/rcra_c/pd-o/riskman.htm) developed by the U.S. Environmental Protection Agency (EPA) Region 6 whenever the Administrative Authority determines that it will serve to facilitate the corrective action. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede existing Federal, State, and local regulations. The two primary objectives are to

prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional RCRA corrective action process. Appendix 1 of this permit contains a summary of corrective action activities completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an impasse occur between the Permittee and the Administrative Authority. The Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

VIII.A.2. Performance Standards

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, ground water designation (current and reasonably expected future use), types of receptors present, exposure pathways,

etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment.

The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

VIII.A.2.a. Source Control Performance Standard

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for migration of contamination to soil, sediment, ground water, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

VIII.A.2.b. Statutory and Regulatory Performance Standard

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

VIII.A.2.c. Final Risk Goal Performance Standard

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

VIII.A.3. Use of RECAP

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

The RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

The RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

The RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

VIII.A.3.a. Screening Option

The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

VIII.A.3.b. Management Option 1

The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected

at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

VIII.A.3.c. Management Option 2

The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

VIII.A.3.d. Management Option 3

The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

VIII.A.4. Corrective Action for Releases Beyond Facility Boundary

Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

VIII.A.5. Financial Responsibility (Federal facility - RESERVED in accordance with LAC 33:V.3701.C)

VIII.A.6. Summary of Corrective Action Activities

A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action

program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1 of this permit.

VIII.A.7. Approval of Alternate Schedule

The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING

VIII.B.1. Notice of Intent

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

VIII.B.1.a. General information regarding facility location;

VIII.B.1.b. General information regarding the facility's operational history;

VIII.B.1.c. General discussion on how the Permittee will proceed through the CAS;

VIII.B.1.d. Brief description of proposed performance standards for corrective action; and

VIII.B.1.e. Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

VIII.B.2. Scoping Meeting

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

VIII.B.2.a. A conceptual site model (if one already has been developed);

VIII.B.2.b. Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

VIII.B.2.c. Proposed performance standards for the facility with justification, and potential risk management approaches;

VIII.B.2.d. Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

VIII.B.2.e. A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

VIII.B.2.f. Site-specific concerns (i.e., sensitive environments or special subpopulations);

VIII.B.2.g. Need for interim measures or stabilization activities, if necessary; and

VIII.B.2.h. Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the scoping meeting. The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

VIII.C. REPORTING REQUIREMENTS

VIII.C.1. The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

VIII.C.1.a. A description of the work completed and an estimate of the percentage of work completed;

VIII.C.1.b. Summaries of all findings, including summaries of laboratory data;

VIII.C.1.c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

VIII.C.1.d. Projected work for the next reporting period;

VIII.C.1.e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

VIII.C.1.f. Changes in key project personnel during the reporting period; and

VIII.C.1.g. Summaries of all changes made in implementation during the reporting period.

VIII.C.2. Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

VIII.C.3. In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

VIII.C.4. The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM)

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:1.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.

If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the “base document” to be prepared and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

VIII.D.1. Facility Profile

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

VIII.D.1.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.1.a.(1) General geographic location;

VIII.D.1.a.(2) Property lines with the owners of all adjacent property clearly indicated;

VIII.D.1.a.(3) Facility structures, process areas and maintenance areas;

VIII.D.1.a.(4) Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

VIII.D.1.a.(5) Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

VIII.D.1.b. The Facility Profile shall also include a description of ownership and operation of the facility.

VIII.D.1.c. The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

VIII.D.2. Land Use and Exposure Profile

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

VIII.D.2.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.2.a.(1) Surrounding land uses, resource use locations, and natural resources/wetlands;

VIII.D.2.a.(2) Locations of sensitive subpopulations; and

VIII.D.2.a.(3) An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of the RECAP.

VIII.D.3. Physical Profile

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

VIII.D.3.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.3.a.(1) Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

VIII.D.3.a.(2) Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

VIII.D.3.a.(3) Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

VIII.D.3.a.(4) Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

VIII.D.3.a.(5) Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity, and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

VIII.D.3.a.(6) Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

VIII.D.4. Release Profile

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

VIII.D.4.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.4.a.(1) Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

VIII.D.4.a.(2) Isopleth maps depicting lateral extent and concentrations of COCs;

VIII.D.4.a.(3) Results of fate and transport modeling showing potential exposure concentrations and locations; and

VIII.D.4.a.(4) Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

VIII.D.4.b. Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

VIII.D.4.c. Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

VIII.D.5. Ecological Profile

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways. When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

VIII.D.5.a. A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

VIII.D.5.b. A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

VIII.D.5.c. A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

VIII.D.5.d. A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

VIII.D.5.e. An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of the RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

VIII.D.6. Risk Management Profile

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

VIII.D.6.a. A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

VIII.D.6.b. A list of identified site-wide data gaps for further investigation.

VIII.D.6.c. Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

VIII.E. INTERIM MEASURES

VIII.E.1. If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

VIII.E.2. The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

VIII.E.3. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

VIII.E.3.a. Time required to develop and implement a final remedy;

VIII.E.3.b. Actual and potential exposure to human and environmental receptors;

VIII.E.3.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

VIII.E.3.d. The potential for further degradation of the medium in the absence of interim measures;

VIII.E.3.e. Presence of hazardous wastes in containers that may pose a threat of release;

VIII.E.3.f. Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to ground water or surface water;

VIII.E.3.g. Weather conditions that may affect the current levels of contamination;

VIII.E.3.h. Risks of fire, explosion, or accident; and

VIII.E.3.i. Other situations that may pose threats to human health and the environment.

VIII.E.5. Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

VIII.E.6. At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN

VIII.F.1. The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

VIII.F.1.a. The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

VIII.F.1.b. The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

VIII.F.1.c. Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

VIII.F.1.c.(1) Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

VIII.F.1.c.(2) Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

VIII.F.1.c.(3) Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

VIII.F.1.c.(4) Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

VIII.F.1.c.(5) Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

VIII.F.1.c.(6) 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

VIII.F.1.c.(7) RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

VIII.F.1.c.(8) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3rd Edition. November 1992, with revisions;

VIII.F.1.c.(9) The LDEQ Handbook - **Construction of Geotechnical Boreholes and Groundwater Monitoring Systems,"** prepared by the LDEQ and the Louisiana Department of Transportation and Development. This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

VIII.F.1.c.(10) The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).

VIII.F.2. After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

VIII.F.3. The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to

Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

VIII.G.1. The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

VIII.G.2. Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

VIII.H. RECAP REPORT

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

VIII.H.1. The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

VIII.H.2. The report shall include, but not be limited to, the following:

VIII.H.2.a. Documentation of site investigation activities and results;

VIII.H.2.b. Evaluation of exposure scenarios to document impacts from releases;

VIII.H.2.c. Deviations from the CAS Investigation Workplan;

VIII.H.2.d. Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

VIII.H.2.e. The revised CSM with updated profiles which incorporate investigation and screening results; and

VIII.H.2.f. Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

VIII.I. REMEDIAL ALTERNATIVES STUDY

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

VIII.I.1. The Permittee shall evaluate remedies for each AOI that shall:

VIII.I.1.a. attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the Conceptual Site Model or in later investigations approved by the Administrative Authority;

VIII.I.1.b. control sources of releases;

VIII.I.1.c. meet acceptable waste management requirements;

VIII.I.1.d. protect human health and the environment; and

VIII.I.1.e. meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

VIII.I.2. The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

VIII.I.3. The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

VIII.I.4. If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

VIII.I.5. The RAS shall at a minimum include:

VIII.I.5.a. An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

VIII.I.5.b. An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

VIII.I.5.d. An assessment of the costs of implementation for potential remedies;

VIII.I.5.e. An assessment of the time required to begin and complete the remedy;

VIII.I.5.f. An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

VIII.I.5.g. An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

VIII.I.6. The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.I.1 through VIII.I.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J. RISK MANAGEMENT PLAN

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

VIII.J.1. The Risk Management Plan shall at a minimum include:

VIII.J.1.a. A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

VIII.J.1.b. The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

VIII.J.1.c. Cost estimates and implementation schedules for proposed final remedies;

VIII.J.1.d. Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities;

VIII.J.1.e. Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

VIII.J.1.f. Contingency plans; and

VIII.J.1.g. Description and schedules for performance reviews.

VIII.J.2. After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

VIII.J.3. If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J.4. After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.J.5. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.J.6. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

VIII.J.7. If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

VIII.K. DETERMINATION OF NO FURTHER ACTION

VIII.K.1. NFA-ATT DETERMINATIONS FOR SPECIFIC SWMUs/AOCs

VIII.K.1.a. Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1¹ permit modification (¹ requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

VIII.K.1.b. If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

VIII.K.1.c. In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1¹ permit modification request.

VIII.K.2. FACILITY-WIDE NFA-ATT DETERMINATION

VIII.K.2.a. Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

VIII.K.2.b. The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

VIII.K.2.c. The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

VIII.K.2.d. If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

VIII.K.2.e. After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.K.2.f. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.K.2.g. If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected

MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

VIII.K.2.h. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

VIII.K.2.i. If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

VIII.K.3. CONTINUED MONITORING

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

VIII.K.4. ADDITIONAL INVESTIGATIONS

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

VIII.L.1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later

than thirty (30) days after construction. The notification shall include the following items, to the extent available:

VIII.L.1.a. The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

VIII.L.1.b. The type and function of the unit;

VIII.L.1.c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

VIII.L.1.d. The period during which the unit was operated;

VIII.L.1.e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

VIII.L.1.f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

VIII.L.2. Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1¹ permit modification request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of ground water monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-

constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1¹ permit modification (¹ requiring Administrative Authority approval) procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

VIII.N. PUBLIC PARTICIPATION REQUIREMENTS

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1¹ permit modification request (¹ requiring Administrative Authority approval) under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within 90 days of the Administrative Authority's approval of the Class 1¹ permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

VIII.N.2. Draft Permitting Decision

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make any necessary revisions to the draft permitting decision. After addressing all public

comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

VIII.N.3. Final Remedy Selection

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

VIII.N.4. Facility-Wide NFA-ATT

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments

received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

Table 1: Corrective Action Strategy Notification and Reporting Requirements

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

ACTION	DUE DATE
Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	Within sixty (60) days of the effective date of this permit (if facility corrective action is required)
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	Within sixty (60) days of submittal of the Notice of Intent
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority
Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	Within one-hundred and twenty (120) days after the scoping meeting
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	Within one-hundred and eighty (180) days after the CAS Scoping Meeting
Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	Within fourteen (14) days of receipt of approval by the Administrative Authority
Submit RECAP Report to the Administrative Authority (Condition VIII.H)	Within ninety (90) days of completion of the site investigation
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	Within ninety (90) days of completion of approval of the RECAP Report by the Administrative Authority
Submit Risk Management Plan to the	Within ninety (90) days of approval of the RAS by

Administrative Authority (Condition VIII.J)	the Administrative Authority
Submit requests for unit specific and facility-wide NFA-ATT determinations to the Administrative Authority (Condition VIII.K)	As necessary
Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	According to the requirements of Conditions II.E.16 through II.E.20 of this permit

APPENDIX 1: SUMMARY OF CORRECTIVE ACTION ACTIVITIES

The intent of Appendix 1 is to provide an overview of the history and current status of the corrective action process at the site at the time of issuance of the final permit and may not necessarily provide a definitive regulatory determination for a particular SWMU or AOC. The classification of an individual SWMU or AOC is subject to change by the Administrative Authority based on future geological/hydrogeological conditions and future available information available to the Administrative Authority.

A RCRA Facility Assessment (RFA), dated December 6, 1989, was prepared for EPA Region VI by PRC Environmental Management. The RFA identified 22 SWMUs. The following SWMUs and AOIs required corrective action under the HSWA Permit issued by USEPA on May 12, 1992:

- SWMU #1 – POL Flightline – Tank Sludge Disposal Areas (DP-21) – underground storage tanks/disposal areas
- SWMU #2 – Tanker Discharge Area South (SS-09)
- SWMU #3 – Original Fire Protection Training Area (FT-22) - spill area
- SWMU #4 – Fire Protection Training Area 1 (FT-01) – spill area
- SWMU #5 – Fire Protection Training Area 2 (FT-02) – spill area
- SWMU #6 – Aqueous Film Forming Foam (AFFF) Retention Pond (DP-28) – retention pond
- SWMU #7 – Macks Bayou (OT-06) – drainage ditch
- SWMU #8 – Sanitary Waste Treatment Plant No. 2 (WP-27) – disposal area
- SWMU #9 – Landfill No. 1 and POL Bulk Fuel Storage Tanks (DP-20) Landfill
- SWMU #10 – Tanker Discharge Area North (SS-08) – disposal area
- SWMU #12 – Landfill No. 2 (LF-03) – Landfill
- SWMU #13 – Landfill No. 3 (LF-03) - Landfill
- AOI – Sanitary Waste Treatment Plant No. 1 (WP-26) – disposal area
- AOI – Cooper Bayou (OT-29) – drainage ditch

Corrective action for each of the above SWMUs is being addressed independently. Furthermore, the EPA has allowed Barksdale AFB to submit their Site Inspection (SI) and Remedial Investigation (RI) reports in place of RFI reports. Likewise, each SWMU has its own individual SI/RI reports.

Attention should also be given to the fact that there were special, site-specific conditions written into the Permittee's traditional RCRA Permit issued on May 20, 1992. These conditions concerned the following features of the installation:

- Inactive Bombing Ranges
- Landfill No. 4
- Four Underground Hazardous Waste Storage Tanks (USTs)

These features were not identified as SWMUs in the 1989 RFA. Likewise, the Inactive Bombing Ranges, Landfill No. 4, and the Four USTs were addressed in the traditional RCRA Permit via Special Conditions.

Special Conditions for the Inactive Bombing Ranges required the submittal of reports to address activities and environmental investigations. Currently, these Ranges are being remediated through the voluntary efforts of the United States Air Force and Department of Defense. Consequently, the Ranges will carry no Special Conditions in the renewal of this Permit.

The Special Conditions for Landfill No. 4 required the submittal of a report addressing the Landfill's closure. As a result, all reports and submittals for the Landfill were reviewed and considered by the Louisiana Department of Environmental Quality, Solid Waste Division. Landfill No. 4's Final Closure Letter was sent by the Solid Waste Division on March 16, 1995, and it relieved the Permittee from all annual post closure care requirements (see Appendix 1 for further reference.)

Requirements under Special Conditions for the Four USTs included submittals to detail all activities and verify their consistency with HSWA requirements. As of 1997, these tanks had been removed under the UST program. Thus, the Four Underground Hazardous Waste Storage Tanks will carry no Special Conditions in the renewal of this Permit.

There is one last site-specific holdover from the traditional RCRA Permit to be mentioned here. Mack's Bayou (also known as SWMU #7) had also been assigned Special Conditions by the 1992 Permit. These Conditions required the submittal of a report containing information in several categories: environmental investigations/corrective actions, contamination, spills, and migratory pathways. It is noted here that this report has been completed, and all requirements of Mack's Bayou's 1992 Special Conditions have been fulfilled. For further information, see Mack's Bayou's site summary, and Table 1.

POL Flightline/Tank Sludge Disposal Areas (DP-21)

The flightline and tank sludge disposal areas are located between the flightline of Barksdale AFB and Macks Bayou. There are nine Petroleum, Oil, and Lubricants (POL) tank sludge disposal areas, each one located behind a corresponding flightline pumphouse. These features line an approximate 1.5 mile interval of the flight apron. Between the years of 1954 and 1978, these areas received sludge for weathering every time the POL tanks were cleaned (approximately every six years during the above-designated time frame). Furthermore, Pumphouse 3 was reportedly the site of a 10,000 gallon spill of Jet Propellant #4 Jet Fuel (JP-4). The following Constituents of Concern (COCs) have been detected in soil and/or groundwater:

- Thallium
- Arsenic
- 1,2-dibromo-3-chloropropane
- 2-ethylhexyl phthalate (diphthalate)
- 1,1,2,2, tetrachloroethane

- Vanadium

Various RI activities occurred from 1988 to 1993. These included a complete regrading of the pits used to accept the tank sludges, and Long Term Monitoring (LTM) at Pump Houses 2,3,4,5,6,7, and 9. A brief corrective action timeline is as follows:

1989 – Site Inspection

1988 to 1993 – Various Remedial Investigation Activities

1997 – RFI performed, as part of SWMU status

1998 – In September, LDEQ accepted RFI recommendations for groundwater LTM

2005 – In December, RECAP report submitted. Informs LDEQ that the above COCs are no longer being detected throughout SWMU 1

Present – Risk based closure levels being negotiated with LDEQ; groundwater LTM anticipated through FY18

Tanker Discharge Area South

The discharge area is located at the southern end of the runway. During the 1950's and 1960's, tanker aircraft periodically discharged surplus JP-4 onto the hammerhead area of the runway and the adjacent grassy field. The following COCs have been detected in soil and/or groundwater.

- Benzene

Brief corrective action summary:

1989 – SI

1990 – site recommended for NFA

1997 to 1999 - RFI monitoring well installation, groundwater and soil sampling performed as part of RCRA Corrective Action Requirements. By 1997, the RFI had determined that no COCs were found to be in excess of the screening level for non-industrial soils.

2003 – January, a recommendation for No Further Response Action Planned (NFRAP) was submitted. This was based upon the RFI findings that neither soil nor groundwater contained any COCs at a level harmful to human health or the environment.

2004 – September, Draft Final Decision Document (DD) was submitted to LDEQ and USEPA in Region VI as part of the RCRA Part B/HSWA Corrective Action permit renewal status.

Present – Permittee recommends NFA. SWMU list being negotiated with LDEQ in conjunction with RCRA Part B/HSWA permit renewal application.

Original Fire Protection Training Area

The area is located along the eastern edge of the flightline near the center taxiway east. Training exercises that consisted of burning combustible fluids and other materials in shallow pits were performed at the site until some time in the 1940's. The following COCs have been detected in soil and/or groundwater:

- Arsenic
- Beryllium
- Barium
- Thallium
- Lead

Brief corrective action summary:

1989 – SI

1989 to 1990 – RI

1990 – September, Barksdale AFB recommends site for NFA

1997 – LDEQ requires additional characterization and RFI is conducted to define extent of soil contamination around former burn pits and identify any groundwater contamination adjacent to burn areas

1998 and 1999 – Additional sampling conducted to delineate any new contamination sources

2000 – March, site characterization report is completed. Interim Remedial Action (IRA) was carried out. This consisted of the removal of 1,548 cubic yards of soil from areas in which lead had been detected at concentrations exceeding LDEQ screening standards. Following the IRA, confirmation soil samples showed all metals, VOCs, and SVOCs were at concentrations below the laboratory detection limits.

2002 – Final IRA report sent to LDEQ along with Barksdale AFB's recommendation for NFA

Present - Permittee recommends NFA. SWMU list being negotiated with LDEQ in conjunction with RCRA Part B/HSWA permit renewal application.

Fire Protection Training Area 1

This area is located near the southern end of the runway, approximately 960 feet west of Cooper Bayou. This fire protection training area had been used regularly from the 1940's until 1975. Training fires were ignited using solvents, thinners, paints, oils, contaminated fuels, and other combustible fluids. The following COCs have been detected in soil and/or groundwater:

- Phthalates
- Beryllium
- Lead

Brief corrective action summary:

1985 and 1986 – Preliminary Assessment (PA) completed

1989 – SI

1992 – RI completed. Site considered closed under ERP but identified as SWMU 4 in HSWA Section of Barksdale AFB RCRA Permit

1997 to 1998 – RFI performed and groundwater sampled for total/dissolved metals; Barksdale AFB recommends site for NFA

1998 – September, site closure is accepted by LDEQ

Present – Permittee recommends NFA. SWMU list being negotiated with LDEQ in conjunction with RCRA Part B/HSWA permit renewal Application.

Fire Protection Training Area 2

This area is located at the intersection of Security and Range Roads near Cooper Bayou. It was in Operation from 1975 until 1996, and 50 to 800 gallons of JP-4 fuel were used for each fire. Likewise, aqueous film forming foam (AFFF), halo, and dry chemicals have been used as extinguishing agents. The following COCs have been detected in soil and/or groundwater:

- Naphthalene
- Arsenic
- Thallium
- Benzene
- Bis(2-ethylhexyl) phthalate

Brief corrective action summary:

1988 to 1990 – SI

1992 – Multi-site RI

1997 - RFI groundwater sampling to meet RCRA corrective action requirements. Additional borings sampled and monitoring wells installed

1999 – June through October, RA was performed. Former burn site was regraded and covered. 600 CY of lead-contaminated soil were removed from former burn area

2005 – December RECAP report submitted to LDEQ

Present – Ongoing groundwater LTM and natural attenuation evaluation

AFFF Pond

AFFF Pond is located near the western Base boundary and is adjacent to a corrosion control shop on the western side of the flightline. Drains from the CC facility originally led directly to the pond (which was used to store AFFF during biodegradation). The following COCs have been detected in soil and/or groundwater:

- Thallium
- VOC's

Brief Corrective Action Summary:

1989 – 1993 SI with various RI activities

1997 – RFI performed to fulfill RCRA requirements for SWMU sites

1998 – LDEQ approves RFI report recommendation for Groundwater Long Term Monitoring

2005 – In December, Draft of Final RECAP report submitted to LDEQ

Macks Bayou

Macks Bayou is a major drainage channel that flows east-southeast before entering the Flat River. The channel received various types of shop wastes and miscellaneous spills associated with the maintenance areas. The following COCs have been detected in soil and/or groundwater:

- alpha-Chlordane
- gamma – Chlordane
- DDT, DDD, DDE

Brief Corrective Action Summary:

1989 – SI

1995 – RI report accepted by LDEQ as draft RFI report

1996 – Ecological Risk Assessment (ERA) submitted

1997 – Conclusions/recommendations of ERA accepted by LDEQ

1998 – RFI delineation of contamination and migration potential

2002 – Long Term Monitoring/closure report submitted

Sanitary Waste Treatment Plant No. 2 (WP-27)

Sanitary Waste Treatment Plant No. 2 is located on the eastern side of the main base and was used to treat wastewater from the Weapons Storage Area. The following COCs have been detected in soil and/or groundwater:

- Di-n-octylphthalate
- Beryllium
- Arsenic
- Barium
- Selenium

Brief Corrective Action Summary:

1989-1990 SI and closure under Environmental Restoration Program (ERP)

1997 – 1999 Additional characterization done in accordance of HSWA permit

1998 – LDEQ concurrence with Barksdale AFB's recommendation for NFA

2004 – HSWA Permit Renewal Application contains Draft Final Decision Documents for various sites in the permit renewal application, including this one. These documents express the Permittee's recommendations/justifications for the sites' NFAs.

Landfill No. 1 and POL Tank Farm Area

Landfill No. 1 had been used in the early 1930's and 1940's to receive hardfill materials, refuse, aircraft and shop wastes. The Petroleum, Oil, and Lubricant (POL) bulk storage area was constructed on top of the northern part of Landfill No. 1. The following COCs have been detected in soil and/or groundwater:

- Methane
- Ethane
- Ethylamine
- Thallium
- Vanadium
- Selenium

Brief Corrective Action Summary:

1988-1993 Various SI/RI activities, including installation/sampling of six groundwater monitoring wells

1998 – RFI performed, Groundwater Long Term Monitoring proposal accepted by LDEQ

2005 - LDEQ RECAP report submitted (December)

Tanker Discharge Area North

The Tanker Discharge Area (North) is located at the northern end of the runway at Barksdale AFB. It was used during the 1950's and 1960's to discharge excess JP-4 from tanker aircraft. No COCs have been detected in soil and/or groundwater.

Brief Corrective Action Summary:

1989-1990 SI and subsequent Draft Final Decision Document recommending closure based on sampling results

1997-1999 RFI work completed in accordance with 1992 HSWA permit

2004 - HSWA Permit Renewal Application contains Draft Final Decision Documents for various sites in the permit renewal application, including this one. These documents express the Permittee's recommendations/justifications for the sites' NFAs.

Power Production Facility

The Power Production Facility is located between the flightline and Weapons Storage Area (WSA) near an intersection of two streets. At this facility, lead battery acid from portable generators was neutralized in a container on a concrete wash rack behind the building. After neutralization, the acid was discharged to a surface ditch via a drain in the concrete with a grit trap. The following COC's have been detected in soil and/or groundwater:

- Lead
- Barium
- Cadmium
- Cyanide
- Chromium
- Copper
- Zinc

Brief Corrective Action Summary:

1991-1992 RI performed

1996 – In June, RA performed; 160 CY of soil were removed and disposed at an industrial solid waste landfill

1997- RFI performed; no metals detected exceeding LDEQ screening levels

2004 - HSWA Permit Renewal Application contains Draft Final Decision Documents for various sites in the permit renewal application, including this one. These documents express the Permittee's recommendations/justifications for the sites' NFAs.

Landfill No. 2

Landfill No. 2 is located near the northern base boundary on the western side of the Flat River. From the 1940's to the 1960's, it had accepted refuse, brush, demolition & construction debris, shop solvents, oils, and possibly some photographic wastes. Open burning had also been conducted (during the early years of operation.) The following COC's have been detected in soil and/or groundwater:

- 1,1 dichloroethene

Brief corrective action summary:

1988-1993 SI/RI activities conducted

1997 – RFI conducted in accordance with 1992 HSWA Permit

2002 – In September, Remedial Action-Construction (RA-C) performed to remove surface debris and clear vegetation, build a gravel road, and remove scrap metal.

2005 - LDEQ RECAP report submitted

Landfill No. 3

Landfill No. 3 is located near the northern base boundary on the eastern side of the Flat River. From the mid 1960's to 1978, the landfill had accepted concrete rubble, asphalt, wood and metals in the southern portion. The northern portion had received refuse, shop solvents, oils, paints, and possibly some photographic wastes. The following COC's have been detected in soil and/or groundwater:

- Benzene

Brief corrective action summary:

1988-1993 SI/RI activities conducted

1997 – RFI conducted in accordance with 1992 HSWA Permit

2000 – In September, Remedial Action-Construction (RA-C) performed to regrade and cover

2005 - LDEQ RECAP report submitted

Waste Treatment Plant No. 1

Waste Treatment Plant No. 1 is located east of the Red Chute Bayou on the East side of BAFB. The site had been the sewage treatment plant for the housing area from 1952 to 1980. No COC's have been detected in soil and/or groundwater.

Brief Corrective Action Summary:

1989 - SI. Base recommends site for NFA in April.

1997 to 1999 - Additional characterization carried out in accordance with LDEQ request

1998 - Site closed, LDEQ agrees with NFA recommendation

2004 - HSWA Permit Renewal Application contains Draft Final Decision Documents for various sites in the permit renewal application, including this one. These documents express the Permittee's recommendations/justifications for the sites' NFAs.

Cooper Bayou

Cooper Bayou is a drainage bayou running through Bossier City along the northern border of the base. Until 1980, it had received treated effluent from Waste Treatment Plant No. 1. Cooper Bayou had also reportedly received fuel spills from along the flight line. The following COC's have been detected in soil and/or groundwater:

- DDE
- Arsenic
- Barium
- PAH, TPH
- Chromium
- Cobalt
- Lead
- Manganese
- Nickel
- Zinc
- Vanadium

Brief Corrective Action Summary:

1989-1993 SI/RI activities

1995 - RI report accepted by LDEQ as Draft RFI report (with the stipulation that additional information would be provided)

1996 - ERA submitted recommending LTM for sediment

2002 - LTM/Closure report submitted to LDEQ and EPA

2004 - HSWA Permit Renewal Application contains Draft Final Decision Documents for various sites in the permit renewal application, including this one. These documents express the Permittee's recommendations/justifications for the sites' NFAs.

TABLE 1. SUMMARY OF CORRECTIVE ACTION ACTIVITIES

<i>AOC or SWMU Number/Area Name</i>	<i>AOC/SWMU Description</i>	<i>Status of Activity</i>	<i>Corrective Action</i>	<i>EDMS Document ID #/ Approval Date</i>
SWMU #1 POL Flightline – Tank Sludge Disposal Areas	9 POL tank sludge disposal areas, one behind each former flightline pumphouse. Received tank sludge periodically for weathering.	RECAP submitted in December 2005 (deficient – need to resubmit)	Re-submit RECAP Evaluation	8491436 (09/30/1998 approval for Draft LTM Plan) RECAP – 34036543, 03/10/2006
SWMU #2 Tanker Discharge Area South (SS-09)	South end of runway; used to discharge excess jet fuel from tanker aircraft in 1950s and 1960s. Fuel rinsed off runway with water.	Rev. RFI Rpt Approval ltr	Review historical reports to determine if NFA* possible	7092355 – 05/01/1998 draft RFI report 8491433 – 09/30/1998 draft RFI report approval ltr
SWMU #3 Original Fire Protection Training Area (FT-22)	East of flightline, near center east taxiway. During 1940s, training conducted in shallow pits adjacent to taxiway.	Rev. RFI Rpt EE/CA IRA-Soil Removal Decision Document	Re-evaluate last submittal after soil removal	7092355 – 05/01/1998 draft RFI report 8589413- 02/01/2000 Engineering Evaluation/Cost Analysis 33271393 – January 2003 Draft NFRAP DD starts page 71
SWMU #4 Fire Protection Training Area 1 (FT-01)	Near Security Road (southwestern portion of base). Site about 2 acres in area; used for fire training exercises in 1940s-1975. Shallow pits using a variety of combustible materials and extinguishing agents were employed.	Interim Removal Action Report	Review and determine if NFA* possible	19322340 – 06/01/2001 Final Report on IRA
SWMU #5 Fire Protection Training Area 2 (FT-02)	3-acre site near Security Road at Range Road near Cooper Bayou in NW Section of Base. Training occurred twice a month from 1975 -1994, in unlined pits. Various fuels and shop wastes and extinguishing agents employed.	RECAP submitted in December 2005 (deficient – need to resubmit)	Resubmit RECAP Evaluation	34036541 – December 2005 FT02 RECAP submittal
SWMU #6 AFFF Pond (DP-28)	Corrosion Center shop drains directly to this holding pond that was used to store	RFI L-T Monitoring	Resubmit RECAP Evaluation	34035552-December 2005 Risk

	spent aqueous fire-fighting foam (AFFF) while biodegradation occurred.	RECAP in 2005 (deficient – need resubmit)		Evaluation/Corrective Action Program (RECAP) Aqueous Film-Forming Foam Retention Pond
SWMU #7 Macks Bayou (OT-06)	Major drainage canal along southwestern facility boundary. During 1940s and 1950s, was used by Base shops and maintenance areas as discharge sink.	Record of Decision (ROD)	NFA in progress	33214095-9/1/2004 ROD for Mack's Bayou
SWMU #8 Sanitary Waste Treatment Plant No. 2 (WP-27)	Along western edge of weapons storage area, north of ACLM facility, building 7721. Plant operated until 1960s and discharged directly to Cooper Bayou.	Additional sampling Decision Document	Re-evaluate historical record to determine if NFA possible	various
SWMU #9 Landfill No. 1 and POL Tank Farm Area (DP-20)	Near east bank of Mack's Bayou in SW portion of Base. Occupies 22 acres. Landfill 1 used in 1930s-1940s for refuse and shop wastes. Tank farm constructed atop landfill in 1960s.	December 2005 RECAP (deficient – need to resubmit)	Resubmit RECAP Evaluation	34035752-December 2005 Risk Evaluation/Corrective Action Program (RECAP) Landfill No. 1/Pol Tank Farm Area (DP-20)
SWMU #10 Tanker Discharge Area North (SS-08)	North end of runway used to discharge excess JP4 in 1950s and 1960s from tanker aircraft. Fuel then flushed off runway with water. In 1977, JP4 spilled on the runway adjacent to this site.	RFI Approval letter (RFI) Decision Document	Evaluate historical record and DD to determine if NFA possible	7092355 – 05/1/1998 Revised Draft - RCRA Facility Investigation report 8491433 – 09/30/1998 approval of revised draft RCRA facility investigation report
SWMU #11 (ST-33) Power Production Facility	Between flightline and weapon storage area near Turner Avenue and Pritchard Drive. Lead acid battery acid from generators was neutralized in a container on a concrete wash rack. Following treatment the acid was discharged to a ditch via a drain in the concrete. In 1988 the drain was connected to sanitary sewer.	RFI Approve above Decision Document	Evaluate historical record and DD to determine if NFA possible	7092355-05/1/1998 Revised Draft - RCRA Facility Investigation report 8491433 – 09/30/1998 approval of revised draft RCRA facility investigation report
SWMU #12 Landfill No. 2 (LF-03)	20 acre site; used in 1940s -1960s for disposal of various wastes including some from shops in 10-15-ft deep trenches. Some open burning in early years of operation.	December 2005 RECAP (deficient – need to resubmit)	Resubmit RECAP Evaluation	34035594 December 2005 Risk Evaluation/Corrective Action Program (RECAP) Landfill No. 2, SWM Unit 12
SWMU#13 Landfill No. 3 (LF-03)	About 25 acres. Used in 1960s – 1978 for disposal of various refuse including some shop wastes, buried in trenches about 10-ft	December 2005 RECAP (deficient – need to resubmit)	Resubmit RECAP Evaluation	34035594 December 2005 Risk Evaluation/Corrective Action Program (RECAP)

	deep. Some open burning in early years of operation.			
AOI#1 – Sanitary Waste Treatment Plant #1; Site WP-26	East Reservation west of Capehart Housing, along north side of Perimeter Rd. This was the sewer treatment plant for the Housing development from 1952 -1980. Wastewater treated in tanks then discharged to nearby surface impoundment. Sludge from impoundment periodically removed to nearby drying beds.	Record of Decision (9/01/2004)	Evaluate historical record and DD to determine if NFA possible	33371737 – September 2004 Draft final Record of decision site WP-26-Sanitary waste treatment plant 1
AOI#2– Cooper Bayou (OT-29)	Located along northwestern boundary of base, and flows into Mack's bayou near south end of flight line. Until 1980, received treated effluent from WP27. May have received runoff from fuel spills along flight line.	RFI EcoRisk Assess. LTM Decision Document	NFA in progress	24683473 11/1/2002 Semi Annual Report (Mack's and Cooper Bayous)

denotes NFA with conveyance notice

NOTE: Landfill No. 4 (not an AOC or SWMU) was a solid waste landfill located in the far northeast area of the Base. It was used for residential and shop wastes until the 1970's. Although Landfill No. 4 carried 'Special Conditions' in Barksdale AFB's original RCRA Permit (issued May 20, 1992), it will not be, in any way, regulated by this Corrective Action Permit. A Final Closure letter from the Solid Waste Division was issued for Landfill No. 4 on March 16, 1995. This letter is Document No. 10429241 in the Electronic Document Management System.